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Remarks

Claims 1-25 are pending and stand rejected.

Claim 1, 8, 9 17-19, AND 25 has been amended.

Claim Objections

The second claim 22 was renumbered as claim 25 so the claims are numbered in consecutive order.

A period was added to the end of claim 9, placing this claim in proper form.

It is believed these two amendments overcome the claim objections.

35 U.S.C. §112

Claims 8, 17-19 and 25 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular:

Claim 8 contains the phrase "such as" and the terms "colors" and "over-the-counter actives". Applicant has amended claim 8 to remove these terms and overcome the rejection.

Claims 17-19 are rejected because the term "a hydrophobic compound" renders the claims vague. Applicant has amended claims 17-19 to read "percent by weight of said hydrophobic compound, based on the weight of said starch-encapsulated hydrophobic compound." This amendment is supported by original disclosure at page 4, lines 5-8, describing what percentage by weight of the starch-encapsulated hydrophobic compound is the hydrophobic compound itself.

Claim 25 is rejected for insufficient antecedent basis. Claim 25 has been amended to properly depend from claim 24.

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35 U.S.C. §102

Claims 1, 3, 5, 8, 9-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by Blue, et al., U.S. Patent Number 5,935,826.). A *prima facie* case of anticipation under 35 U.S.C. §102 requires that the reference teach every element of the claim. The Blue reference discloses a hydrophobically modified starch which can be used as an encapsulating agent to form an encapsulated powder that instantly disperses in water. "The encapsulated product is effective when stored as a powder and spontaneously releases the active agent upon exposure to moisture", column 7, lines 37-39. The Blue reference fails to teach a stable formulation comprising both a starch-encapsulated hydrophobic compound and water, thus fails to present a *prima facie* case of anticipation. Not only does the Blue reference fail to teach starch-encapsulated hydrophobic compounds that are stable in a water formulation, but it teaches exactly the opposite: a starch-encapsulated compound that is instantly unstable and breaks when exposed to moisture.

35 U.S.C. §103Wurzburg et al in view of Eskin et al

Claims 1-4 and 8-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Wurzburg et al. ("Modified Starches: Properties and Uses", 1986) in view of Eskin et al (US Patent Number 5,882,713. A *prima facie* case of obviousness under 35 U.S.C. 103 requires that the reference(s) must teach or suggest all of the claim limitations.

The Wurzburg reference discloses "very water sensitive" spray dried starch powders that can be used as encapsulation agents. Because of the water sensitivity, the Wurzburg starch-

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encapsulated compound are used as dry powders only. The Wurzburg reference fails to present a *prima facie* case of obviousness, since it fails to teach starch-encapsulated compounds that are stable in water. Further, the Wurzburg reference teaches away from Applicant's claims by teaching water-sensitive encapsulated compounds, and there would be no reasonable expectation of success for the use of the Wurzburg water-sensitive compounds to form the stable aqueous formulation claimed by Applicant.

The Eskins reference describes starch-oil composite powders, in which the starch and oil do not separate. The starch-oil composites may be dispersed in water to form smooth, stable dispersions. The starch-encapsulated hydrophobic compounds claimed by Applicant are formed by the method described in the Eskins reference.

There is no suggestion or motivation in either the Eskins reference or the Wurzburg reference to combine the two references. There is nothing to suggest combining the references to form stable water-based formulations. Wurzburg clearly teaches away from such a formulation, as described above, and the use of Wurzburg starch-encapsulated compounds in a water-based formulation would render the product unsatisfactory for its intended use. The use of the starch-oil composite of Eskins in the Wurzburg reference would produce a dry powder useful for cosmetics and personal care applications - but would not be a stable aqueous formulation.

The Eskins reference describes a process to produce the starch-encapsulated hydrophobes used by Applicant to form stable, aqueous personal care or cosmetic formulations. While the Eskins reference makes a passing reference to cosmetic and personal care application for the starch-encapsulate, it fails to enable this vague reference. Most of the cosmetic and personal care products listed are powders or water-in-oil emulsions. Of the 59 Examples provided by the Eskins reference, none are in the areas of either cosmetics or personal care products. Moreover,

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none of the many applications exemplified in the Eskins reference involve formulating the starch-encapsulated water-immiscible into a stable aqueous formulation of any kind. It would not be obvious to one of ordinary skill in the art how to form the table aqueous personal care formulations claimed by Applicant, based on the disclosures of the Eskins reference.

The mere fact that a reference can be modified does not render the modification obvious unless the prior art also suggests the desirability of the modification. It must be obvious from the reference(s) that the modification will succeed. There is no such teaching or suggestion in the Eskins reference leading one in the art to practice Applicant's claims with any obviousness of success. The reference is silent on such a formulation, and teaches away from such a formulation by exemplifying primarily powdered or oil-based formulations. One would not be motivated by the Eskins reference to practice the formulation claimed by Applicant.

Wurzburg et al. and Eskin et al in view of Roulier

Claims 3, 5 and 7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Wurzburg et al., Eskin et al., as applied to claims 1, 2, 8-21 and 23-25, and further in view of Roulier et al., EP 0938892 A1. The Roulier reference discloses a cosmetic and/or dermatological dry powder. The Roulier reference fails to disclose a stable aqueous formulation. The Examiner improperly cites the Roulier reference as disclosing the modified starch of claims 3, 5, and 7. The starches of claims 3, 5, and 7 form stable aqueous personal care or cosmetic formulations when combined with water, however the Roulier compounds do not form stable aqueous formulations, and therefore are not the same as those claimed by Applicant. The Roulier reference discloses anhydrous powders – paragraph 007, line 2. An anhydrous powder formulation is not an aqueous formulation. The Roulier reference not only fails to correct the

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deficiencies of the Wurzburg and Eskin references, it teaches away from Applicant's claimed stable aqueous formulation by teaching powder formulations.

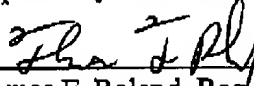
Wurzburg et al., Eskin et al., Roulier et al., in view of Fletcher et al

Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Wurzburg et al., Eskin et al., and Roulier et al., as applied to claims 1, 2, 8-21 and 23-25, and further in view of Fletcher et al. (U.S. Patent Number 6,261,543 B1). The Fletcher secondary reference is cited to show the use of a cationically-modified starch in an anti-perspirant. The Fletcher reference fails to disclose a starch-encapsulated hydrophobic compound, or a stable aqueous personal care or cosmetic formulation, and therefore fails to correct the deficiencies of the other cited references.

Neither the Fletcher reference alone, nor in combination with the other cited reference teaches or suggests Applicant's claims, therefore no *prima facie* case of obviousness is presented.

Applicant respectfully submits that the foregoing is a complete response to the Office Action, and requests the Examiner to remove all rejections and pass the application to issuance at this time.

Respectfully submitted,



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December 19, 2001

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APPENDIX 1

Version with markings to show changes made

The claims were amended in the following manner:

What is claimed is:

1. (amended) A stable, aqueous personal care or cosmetic formulation comprising:
 - c) a starch-encapsulated hydrophobic compound; and
 - d) water,wherein said starch-encapsulated hydrophobic compound is essentially non-separable in said aqueous formulation.
8. (amended) The aqueous formulation of claim 1 wherein said hydrophobic compound is selected from the group consisting of mineral oils, oils of plant and animal origin, synthetic oils, fats, lipids, fatty acids, fatty alcohols, esters, ethers, wax, jojoba oil, soybean oil, silicones, vitamins [such as], vitamin A, D, E, and K, fragrances, emollients, petrolatum, [colors,] pigments, [over-the-counter actives,] water-insoluble polymers, anti-perspirants, sun screen actives, benzophenone-3 (oxybenzone), octyl methoxy cinnamate, water insoluble solvents, insect repellants, and mixtures thereof.
9. (amended) The aqueous formulation of claim 1 comprising at least 0.1 percent by weight and up to 99 percent by weight of said starch-encapsulated hydrophobic compound.
17. (amended) The aqueous formulation of claim 1 wherein said starch-encapsulated hydrophobic compound comprises from 1 to 80 percent by weight of said hydrophobic compound, based on the weight of said starch-encapsulated hydrophobic compound. [of at least one hydrophobic compound.]
18. (amended) The aqueous formulation of claim 14 wherein said starch-encapsulated hydrophobic compound comprises from 5 to 65 percent by weight of said hydrophobic compound, based on the weight of said starch-encapsulated hydrophobic compound. [of a hydrophobic compound.]
19. (amended) The aqueous formulation of claim 15 wherein said starch-encapsulated hydrophobic

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compound comprises from 20 to 40 percent by weight of said hydrophobic compound, based on the weight of said starch-encapsulated hydrophobic compound. [of at least one hydrophobic compound.]

[22.] 25. (amended) The process of claim [21] 24 further comprising drying said starch-encapsulated hydrophobic compound after jet-cooking and prior to formulation.